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## SCS ENGINEERS

July 28, 2009 File No. 02199312.02-2

Mr. Johnny Beal Facility Manager Wake County Solid Waste Management Division PO Box 550 Raleigh, North Carolina 27609



Subject:

Landfill Gas Monitoring Results – July 2, 2009

North Wake Landfill – Wake County, North Carolina

Dear Johnny:

SCS Engineers, PC (SCS) is pleased to submit the results of the Monthly Landfill Gas (LFG) Monitoring Event, performed at the North Wake Landfill on July 2, 2009. This monitoring was performed in accordance with the updated Landfill Gas Remediation Plan, dated 7/12/07. Correspondence serving as notification of the methane exceedance detected at LFG monitoring probes M-3 and M-16 was submitted to NCDENR on 6/19/09. Monitoring probes M-3 and M-16 regained compliant status during the June 24, 2009 verification monitoring event. The probes remained in compliance status during the July monthly monitoring event.

SCS used a GEM-2000 Infrared Gas Analyzer to measure subsurface concentrations of methane, carbon dioxide, oxygen, balance gas, and pressure at probes M-3 and M-16, which had exhibited methane levels in excess of the regulatory limit during the second quarter probe monitoring event. The monitoring results of this monthly monitoring event are presented in Exhibit 1.

The methane concentration recorded at probes M-3 and M-16 on July 2, 2009 was below the regulatory limit of 5 percent. This is consistent with the June 24, 2009 verification monitoring event and the sustained reduction in methane concentration is most likely attributed to the increase in applied vacuum on the LFG collection system in the vicinity of these probes.

SCS has recorded methane concentrations in probes M-3 and M-16 below the regulatory limit of 5 percent for one (1) month. Therefore, in accordance with the updated LFG Remediation Plan, the frequency for monitoring at LFG probes M-3 and M-26 will remain monthly until the probes have established compliance for three (3) consecutive months. SCS will continue to coordinate with Wake County and WGP to monitor the active LFG perimeter migration control system performance and evaluate the impact on subsurface methane levels at the perimeter LFG monitoring probes during the next two (2) months until ongoing compliance is demonstrated.

Mr. Johnny Beal July 28, 2009 Page 2

If you have questions or require additional information, please feel free to contact either of the undersigned.

Sincerely,

D. Brandon King Staff Scientist

Scott N. Mortimer

Sr. Project Professional

SCS ENGINEERS, PC

DBK/SNM:asd

cc:

Jim Onofrio, WGP Jeff Daniel, WGP

Jackie Drummond, NCDENR

Enclosure

## EXHIBIT 1. LANDFILL GAS MONITORING PROBES AROLINA

Equipment: Personnel:

DBK GEM-2000

Date: Project No: Weather: July 2, 2009 02199312.02 Sunny, 90°F

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Notes:	M 16	<b>M</b> 3	Monitoring Probe No.
·	12:27	7:11	Time (24-hr)
	1.6	0.0	Methane (% vol)
	1.6	0.2	Carbon Dioxide (% vol)
	16.0	19.7	Oxygen (% vol)
9 9000	80.8	80.1	Balance Gas (% vol)
	-0.1	0.0	Pressure (in-wc)